Thomas Jefferson University | Jefferson Medical College

Jefferson Cancer Institute

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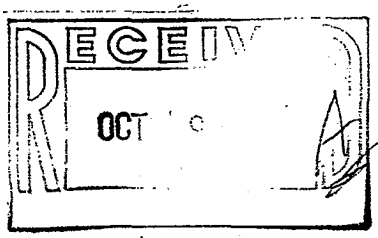
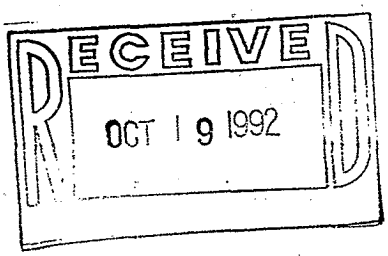


Letter Concerning the Protocol application

October 14, 1992



Donald H. Ford, Ph.D.
Associate Research Director
Council for Tobacco Research
U.S.A. Incorporated
900 Third Avenue
New York, N.Y. 10022

Dear Dr. Ford:

A friend and colleague, Dr. Lakshmi Atchison, recommended that I get in touch with you regarding a grant which I am writing that may be appropriate to send to the Council for Tobacco Research. This grant is entitled "Isolation of a Candidate Gene for Renal Cell Carcinoma". As you are probably already aware, the development of this cancer is associated with tobacco use. However, the etiology of renal cell carcinoma is still not known. My laboratory is located within the Jefferson Cancer Institute, which is a new component of the Thomas Jefferson Medical College in Philadelphia. We have been interested in studying this malignancy for the last three years and we have been developing new technology which we feel will help to define the precise genetic region that is responsible for its development and progression and which ultimately will provide DNA markers to identify individuals who are at a high risk of developing renal cell cancer. This technology is chromosome microdissection and it involves direct dissection from the chromosome, pieces of DNA which are altered as a result of a chromosome rearrangement. We have focused our attention on one family who segregate a chromosome translocation and which appears in every family member who eventually acquires this malignancy later in their lifetime. Within the last year we have isolated a series of DNA "microclones" from the altered chromosome region that we are now in the process of characterizing. Greater than 80% of the microclones obtained so far contain unique sequences and we have mapped several in relation to the altered chromosome region. Our strategy will be to pool several of these microclones from either side of the altered chromosome region and to use them to screen a YAC library to yield a DNA insert which spans the altered chromosome region in the cancer patients. The positive YAC clones that we obtain in this manner will contain DNA sequences which are altered or rearranged in patients with renal cell carcinoma. At the same time we willuse the same microclone pool to screen a cDNA library in order to obtain transcribed genes from within this altered region.

The ultimate aim of our investigation will be to isolate a new series of DNA clones which will be used to screen and diagnose at risk individuals or provide information regarding the progressive nature of the tumor in patients already diagnosed. In addition, the strategy will hopefully yield a candidate/tumor suppressor gene for renal cancer. We do know that the strategy we are using is now considered the most direct method of isolating and characterizing genes involved in the development and progression of cancer.

I would appreciate knowing whether this grant proposal would be of interest to the Tobacco Research Council. If so, please feel free to call me at any time at 215-955-4760/4717. I will be happy to provide you with any additional information regarding the project as well as the facilities at the disposal of this research project.

Thank you very much for your time in this matter. I look forward to hearing from you.

Sincerely,

Linda A. Cannizzaro, Ph.D.
Assistant Professor, Microbiology and Immunology
Jefferson Cancer Institute